

**IN THE CLAIMS**

*This listing of claims will replace all prior versions and listings of claims in the application.*

**Listing of Claims:**

1. (Currently Amended) A fuel cell system having: a fuel cell [(1)] generating power as a result of chemical reactions between supplied gases, wherein a coolant flows in the fuel cell and undergoes a temperature increase as a result of absorbing waste heat produced by power generation in the fuel cell; a water tank [(31)]; a humidifying device [(34)] for humidifying at least one supplied gas by using water from the water tank [(31)]; and a coolant temperature regulation device for regulating a temperature of the coolant flowing inside the fuel cell [(1)] so as to control the temperature of the fuel cell [(1)];

the fuel cell system comprising:

a defrosting device [(61)] for melting ice in the water tank by applying heat of the coolant to the water tank [(31)];

a coolant recirculation passage (~~22, 25, 95~~) for allowing a recirculation of the coolant through the defrosting device [(61)] and the fuel cell [(1)];

a flow generator [(21)] for generating a flow of the coolant from the fuel cell [(1)] to the defrosting device [(61)]; and

a controller [(51)] for controlling a startup operation of the fuel cell system, the controller having the function of controlling the flow generator [(21)] to generate a flow of coolant from the fuel cell [(1)] to the defrosting device [(61)] so as to melt ice in the water tank [(31)] while the startup operation of the fuel cell system.

2. (Currently Amended) The fuel cell system as defined by Claim 1, wherein the defrosting device  $[(61)]$  is disposed in the water tank  $[(31)]$  and comprises a heat exchanger  $[(61)]$  allowing heat exchange between the coolant and ice in the water tank  $[(31)]$ .

3. (Currently Amended) The fuel cell system as defined by Claim 2, further comprising a heater  $[(65)]$  for heating the coolant discharged from the defrosting device  $[(61)]$ .

4. (Currently Amended) The fuel cell system as defined by Claim 3, further comprising a temperature sensor  $[(83)]$  for detecting a temperature of the coolant;

wherein the coolant temperature regulation device comprises:

a radiator  $[(26)]$  provided on the coolant recirculation passage;

a first bypass passage  $[(27)]$  branching from the coolant recirculation passage and bypassing the radiator  $[(26)]$ , the heater  $[(65)]$  being disposed in the first bypass passage  $[(27)]$ ; and

a passage switching device  $[(28)]$  for selectively switching the passage for the coolant between a passage passing through the radiator  $[(26)]$  and a passage passing through the first bypass passage  $[(27)]$ ;

and wherein the controller further functions to control the passage switching device  $[(28)]$  in response to a detected temperature of the coolant so as to regulate the temperature of the coolant.

5. (Currently Amended) The fuel cell system as defined by Claim 4, wherein the water tank  $[(31)]$  is disposed in the coolant recirculation passage upstream of the position at which the first bypass passage  $[(27)]$  branches from the recirculation passage.

6. (Currently Amended) The fuel cell system as defined by Claim 3, further comprising a temperature sensor [(83)] for detecting a temperature of the fuel cell [(1)];

wherein the controller further functions to compare the detected temperature of the fuel cell [(1)] with freezing point of water; operate the heater [(65)] when the detected temperature of the fuel cell [(1)] is less than freezing point; and stop the operation of the heater [(65)] when the detected temperature of the fuel cell [(1)] is greater than or equal to freezing point.

7. (Currently Amended) The fuel cell system as defined by Claim 2, further comprising:

a second bypass passage [(91)] branching upstream of the water tank [(31)] and bypassing the water tank [(31)]; and

a passage switching device [(92)] for switching the passage for the coolant between a passage passing through the heat exchanger [(61)] in the water tank [(31)] and a passage passing through a second bypass passage.

8. (Currently Amended) The fuel cell system as defined by Claim 7, further comprising a temperature sensor [(83)] for detecting a temperature of the fuel cell [(1)],

wherein the controller [(51)] further functions to compare the detected temperature of the fuel cell [(1)] with freezing point of water; control the passage switching device [(92)] so that the coolant flows through the second bypass passage when the detected temperature of the fuel cell [(1)] is less than freezing point; and control the passage switching device [(92)] so that the coolant flows through the heat exchanger in the water tank when the detected temperature of the fuel cell [(1)] is greater than or equal to freezing point.

9. (Currently Amended) A fuel cell system having: a fuel cell [(1)] generating power as a result of chemical reactions between supplied gases, wherein a coolant flows in the fuel cell and undergoes a temperature increase as a result of absorbing waste heat produced by power generation in the fuel cell; a water tank [(31)]; a humidifying device [(34)] for humidifying at least one supplied gas by using water from the water tank [(31)]; and a coolant temperature regulation device for regulating a temperature of the coolant flowing inside the fuel cell [(1)] so as to control the temperature of the fuel cell [(1)] ;

the fuel cell system comprising:

a defrosting means [(61)] for melting ice in the water tank by applying heat of the coolant to the water tank [(31)];

a coolant recirculation passage means ~~(22, 25, 95)~~ for allowing a recirculation of the coolant through the defrosting means [(61)] and the fuel cell [(1)] ;

a flow generating means [(21)] for generating a flow of the coolant from the fuel cell [(1)] to the defrosting means [(61)]; and

a control means [(51)] for controlling the flow generator [(21)] to generate a flow of coolant from the fuel cell [(1)] to the defrosting means [(61)] so as to melt ice in the water tank [(31)] while a startup operation of the fuel cell system.

10. (Currently Amended) A control method for controlling a fuel cell system, the fuel cell system having: a fuel cell [(1)] generating power as a result of chemical reactions between supplied gases, wherein a coolant flows in the fuel cell and undergoes a temperature increase as a result of absorbing waste heat produced by power generation in the fuel cell; a water tank [(31)]; a humidifying device [(34)] for humidifying at least one supplied gas by using water from the water tank [(31)]; and a coolant temperature regulation device for regulating a temperature of the coolant flowing inside the fuel cell [(1)] so as to control the temperature of the fuel cell [(1)];

the control method comprising the steps of:

providing a defrosting device [(61)] for melting ice in the water tank by applying heat of the coolant to the water tank [(31)];

providing a coolant recirculation passage (~~22, 25, 95~~) for allowing a recirculation of the coolant through the defrosting device [(61)] and the fuel cell [(1)]; and

generating a flow of coolant from the fuel cell [(1)] to the defrosting device [(61)] so as to melt ice in the water tank [(31)] while a startup operation of the fuel cell system.